Evolving Roles of Physician Extenders

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History of Advanced Level Providers

History of Physician Assistants

- Origins date back to 1650, where Peter the Great introduces German military medical assistants into the Russian army
- 1891 first company for "medic" instruction is established at Fort Riley, Kansas

History of Nurse Practitioners

History of Nurse Practitioners

- 1925 Mary Breckinridge establishes the Frontier Nursing Service in the mountains of Kentucky, formalizing midwifery
- 1957 Thelma Ingles, RN begins clinical training with Dr. Eugene Stead of Duke University, leading to the first master's degree program for nurse clinicians.
  - The program accreditation is rejected by the National League for Nursing.

History of Nurse Practitioners

- 1965 Loretta Ford, RN and Dr. Henry Silver create the first training program for nurse practitioners at the University of Colorado.
- Both physician AND nursing groups opposed this model
- Organized medicine cites NP model as "bad medicine".
- Facing a physician provider shortage, AMA concede that nurses may function in this expanded role under physician direction as "physician extenders".

History of Physician Assistants

- 1964 Dr. Eugene Stead begins providing 2 year clinician training program with former military corpsmen
- 1968 First Baccalaureate PA program at Alderson-Broddus College (Philippe, WV)
- 1970 AMA recognizes PA profession

History of Nurse Practitioners

- 1994 NEJM article legitimized NPs:
  - "When measures of diagnostic certainty, management competence, or comprehensiveness, quality, and cost are used, virtually every study indicates that the primary care provided by nurse practitioners is equivalent or superior to that provided by physicians."
- 2000 JAMA randomized trial:
  - Primary care outcomes do not differ between physician and nurse practitioner delivery.

Education/Certification

Education/Certification

- NPs: An RN that has completed a Master's program and a national certification in area of specialty. Moving toward doctorate degree as entry level education.
- Certification Specialties:
  - Acute Care
  - Adult Health
  - Pediatric
  - Family
  - Geriatric
  - Neonatal
  - Women's Health
  - Midwife
  - Nurse Anesthetist
  - Psychiatric

Education/Certification

- PA's
  - Most programs have moved to Master's degree preparation, although a few baccalaureate still exist
  - Must pass a national certification examination
  - Do not sub-specialize
  - Does not currently support entry level doctorate program

Scope of Practice

- Similar for both disciplines
- Defined at the state level
- Limited by the collaborating agreement between the physician and advanced level provider
- Privileges and credentialing through hospital medical staff offices

Who Will Take Care of Trauma Patients?

- July 2003 Accreditation Council for Graduate Medical Education (ACGME) enact duty hour restrictions for resident physicians, providing for an 80-hour work week
- July 2011, further ACGME restrictions in addition to 80-hour work week
  - PGY-1 duty hours not to exceed 16 consecutive hours
  - PGY-2 duty hours not to exceed 24 consecutive hours

Who Will Take Care of Trauma Patients?

Providing Trauma Care

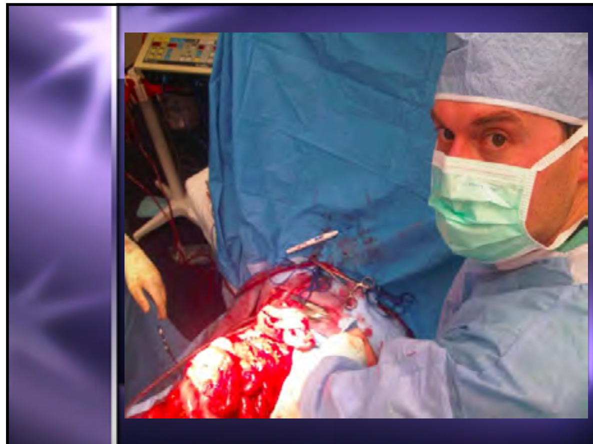
What We Do

- H&Ps/daily progress notes
- Participate in the initial trauma resuscitation
- Daily evaluation of patients
- Order and interpret diagnostic tests
- Diagnose and treat
- Work with the trauma surgeon and the multidisciplinary team to establish a plan of care

What We Do

- Discharge patients/through-put
- See patients in the outpatient trauma office
- Promote prevention
- Provide continuity
- Bill for services
- Education
- Research
- Procedures

This scene is associated with nearly 100% mortality…



Current Utilization in Trauma

- 2010 study concluded that 33% of major trauma centers utilize NPs/PA's
- More ACS verified centers use NPs/PA's
- More Level I vs. Level II centers use NPs/PA's
- 19% of responding trauma centers who did not currently use NPs/PA's plan to do so in the future

Outcomes: What does the evidence say?

- 2009 study evaluated quality of care delivered in an ALP staffed trauma center
  - Outcomes were compared to NTDB
  - Mechanism of injury was used as basis of comparison (percentages similar)
  - The ALP staffed trauma center had shorter LOS for all ISS categories
  - Lower overall combined mortality when categorized by ISS
  - ALP staffed trauma centers provided outcomes at least as good as those reported by NTDB

What does the evidence say?

- Study done at Nationwide Children's Hospital showed that when NPs were available to respond to level II traumas, patient ED length of stay is significantly decreased.
- Retrospective review of care at St. Luke's Hospital in Bethlehem, PA shows the use of ALPs lead to a significant reduction in ICU length of stay without increased incidence of complications.

Possibilities for the Future

- This month, Critical Care Medicine published an article describing the impact of resident physician work hour restrictions on staffing coverage in ICUs
- Will change how we care for critical patients
- Advocates the use of NPs and PA's to bridge the gap in coverage

Conclusions

- Where there is a gap in physician coverage, the literature supports the use of advanced level providers as a cost-effective way to deliver quality care
- At Grant Medical Center, the Trauma surgeons collaborate with the NPs to provide excellence in care.

Even when it's traumatic…

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